

Notice of Allowability

Application No.

10/828,362

Applicant(s)

CURRIE ET AL.

Examiner

Art Unit

Geoffrey L. Knable

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 3-13-06.
2. ☒ The allowed claim(s) is/are 1-3 and 5-11.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for the drawing changes in this examiner's amendment was given in a telephone interview with Howard M. Cohn on May 30, 2006.

The application has been amended as follows:

In the Drawings:

Figures 1C and 1D have been cancelled as noted on the attached "Annotated Sheet".

In the specification:

At page 1, line 4-5, the cross-reference to related applications has been rewritten as follows:

--This is a Divisional application of U.S. application Serial. No. 09/960,215, now U.S. Patent No. 6,863,106, having a filing date of Sep. 21, 2001 and a common assignee with present application.--

In the claims:

The claims have been rewritten in double spaced format as required by 37 CFR 1.52 (otherwise, no substantive changes have been made to the claims as presented in the 3-13-2006 amendment) - see attached "Listing of Claims."


Art Unit: 1733

Summary of above-noted 5-30-2006 Interview: Agreement was reached on canceling figures 1C and 1D as was done in the parent application (to avoid an inconsistency with the Brief Description of the Drawings).

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey L. Knable whose telephone number is 571-272-1220. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Geoffrey L. Knable
Primary Examiner
Art Unit 1733

G. Knable
May 30, 2006

Listing of Claims

1. (previously presented) A tire building drum having an axis and a centerplane intersecting the axis, comprising:

a plurality of axially extending, circumferentially spaced-apart expanding segments, each of said expanding segments being expandable from a first radius in a collapsed condition of said drum to a second radius in an expanded condition of said drum;

a pair of flanges centered about the axis at a fixed distance from one another;

a plurality of ramp elements, each supporting an expanding segment, disposed between the flanges and radially guided between the flanges;

two conical elements, each disposed coaxially between the pair of flanges, axially moveable therebetween, and having a tapered face;

wherein the tapered face of each of the two conical elements engages an inner surface of the ramp elements for forcing the expanding segments radially outward from the axis;

characterized in that:

there are two conical elements, each frustoconical disposed coaxially with their bases facing each other; and

the inner surfaces of the ramp elements are V-shaped; and

a plurality of base members supporting a plurality of fixed segments;

Art Unit: 1733

in each flange, a first plurality of grooves for receiving opposite side edges of the plurality of base members.

2. (original) Tire building drum, according to claim 1, wherein when the conical elements move farther apart from one another, they urge the ramp elements radially outward from the axis.

3. (previously presented) Tire building drum, according to claim 1, further comprising:

in each flange, a second plurality of grooves disposed on an inner surface thereof and extending radially from the axis, for radially guiding the plurality of ramp elements.

4. (canceled).

5. (previously presented) A tire building drum having an axis and a centerplane intersecting the axis, comprising:

a plurality of axially extending, circumferentially spaced-apart expanding segments, each of said expanding segments being expandable from a first radius in a collapsed condition of said drum to a second radius in an expanded condition of said drum;

a pair of flanges centered about the axis at a fixed distance from one another;

Art Unit: 1733

a plurality of ramp elements, each supporting an expanding segment, disposed between the flanges and radially guided between the flanges;

two conical elements, each disposed coaxially between the pair of flanges, axially moveable therebetween, and having a tapered face;

wherein the tapered face of each of the two conical elements engages an inner surface of the ramp elements for forcing the expanding segments radially outward from the axis;

characterized in that:

there are two conical elements, each frustoconical disposed coaxially with their bases facing each other;

the inner surfaces of the ramp elements are V-shaped;

a plurality of base members supporting a plurality of fixed segments;

in each flange, a first plurality of grooves for receiving opposite side edges of the plurality of base members; and

the conical elements have notches at circumferential positions about the outer surface of their respective bases for receiving a bottom edge of the base members.

6. (original) Tire building drum, according to claim 1, wherein:

the expanding segments, ramp elements, flange and conical elements are all located in a center section of the drum.

7. (original) Tire building drum, according to claim 1, wherein:

Art Unit: 1733

both of the two conical elements exerts a force on each of the ramp elements.

8. (original) Tire building drum, according to claim 7, wherein:

the forces exerted by each of the two conical elements are symmetrical about the centerplane.

9. (original) Tire building drum, according to claim 1, further comprising:

a plurality of fixed segments disposed between the plurality of expanding segments.

10. (original) Tire building drum, according to claim 1, wherein:

end portions of the expanding segments are contoured to have pockets for receiving components of a tire carcass being laid up on the drum.

11. (original) Tire building drum, according to claim 1, further comprising:

biasing members exerting a collapsing radial force on the ramp elements.

Claims 12-20 (canceled).

Figures 1C
and 1D
cancelled per
5-30-2006
Examiner's
Amendment

OK

